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ABSTRACT

The evolution of the two-stage cluster sampling plan is described, as are the instruments used to collect survey data from principals, teachers, specialists, and parents. Particular attention is given to the Classroom Activities Log, a unique teacher-completed instrument which provides a complete description of daily student experiences. (Author/MV)

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SAMPLING AND INSTRUMENTATION IN THE TITLE I DEMONSTRATION STUDY

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INTRODUCTION

This paper focuses on the sampling procedures and instrumentation employed in the research on the Title I Demonstration. Several different samples and a complex set of instruments were developed to address the research questions which underlie this comprehensive study. Samples include a principal sample, a specialist sample, a classroom/student sample, and a parent sample. Instruments include questionnaires and other survey forms for the first three of these samples and an interview schedule, designed for face-to-face administration, for the parent sample. No instruments, including achievement tests (which we were prohibited from administering), were completed by students. However, with one or two notable exceptions, all instruments, and therefore the information obtained from them, were linked to students.

Given the pivotal nature of the classroom/student sample, we will first describe its design, explain why it took the form it did, and present the numbers of children, classroom groups, grades, and schools that we originally planned to include from each of the Demonstration districts. We then present data on the actual size of the various actual subsamples for the 1975-76* classroom/student sample. Next we describe the procedures we used for selecting parents, principals, and specialists, and we provide sample-size data for each of these groups. Finally, we describe the various instruments used to obtain data from each of these samples.

Before turning to these discussions, two major points should be made about the sample. First, three of the 16 districts which participated in Year 1 of the Demonstration chose not to participate in Year 2. Because our sample was designed to support analyses within individual districts, the fact that these

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* This is the first or baseline year of the three-year study.

districts chose to withdraw from the Demonstration did not jeopardize the sample. Second, several district implementation plans called for Title I allocation changes which had not been specified in our original design. These changes affect the numbers and types of schools* within the districts receiving or losing Title I services as a result of the Demonstration. Because our sample was designed to anticipate such changes, schools affected in these ways were included in the Year 1 sample. Consequently, the effects of these allocation policy changes can be investigated in this research.

SAMPLE DESIGN

CLASSROOM/STUDENT SAMPLE

In January 1976 we drew a two-stage cluster sample, in which:

- schools were sampled from each of three school types (strata) within each of the Demonstration school districts, and
- children were sampled from the stratefied population of each third and fourth grade classroom in the sampled schools.

We designed the sample so that it could support district-by-district analyses or analyses of various combinations of districts.

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*In our original design we specified that there would be three types of schools in districts affected by the Demonstration: Type I, or schools which received Title I in Year 1 and through the Demonstration; Type II, or schools that did not receive Title I in Year 1 but would begin to through the Demonstration; and Type III, schools which never received Title I. The changes alluded to above resulted in ten general types of schools. The meaning of these additional school types will be explained below.

School Selection

Title I services are generally delivered through schools. In the Demonstration districts, as in the Title I districts nationally, services ranged across all 12 grades and in some instances extended into kindergarten and preschool. Elementary school programs, however, consumed over 80% of the Title I money spent by the Demonstration districts, and instruction in the elementary years was primarily oriented toward the remediation of deficiences in reading and mathematics.

Not only was Title I itself concentrated in the elementary schools, but most of the programmatic and distributional changes proposed by the Demonstration districts were aimed at the elementary grades. Some districts proposed to alter the breadth and scope of elementary Title I programs; others planned to distribute these programs among larger numbers of schools and pupils. In three cases, school districts even proposed to reallocate secondary expenditures in order to increase funds available to elementary pupils.

In keeping with these realities we decided early to focus the attention of the project on the elementary schools in the Demonstration districts. We reasoned that to try to cover both elementary and secondary schools would have stretched the project's resources unduly, since instrumentation that would be suitable for one level would not work well at the other. In view of the important programmatic differences between elementary and secondary school offerings, moreover, it is doubtful that the most important features at one of these levels could also be identified and measured at the other; without such continuity, the study would have been fragmented into separate elementary and secondary school studies.

For purposes of sampling and generalization, we defined an elmentary school as any school containing grade three or grade four. Despite some non-standard grade structure patterns

within the Demonstration school districts, this definition was found to be consistent with existing organizational arrangements.

Within each Demonstration district, some schools were expected to change their Title I status (receiving, or not receiving funds) as a result of the waiver of federal regulations; others were not to change but to continue either receiving or not receiving funds as before. The research questions imply that we must compare the services received by children in different types (strata) of schools within each district:

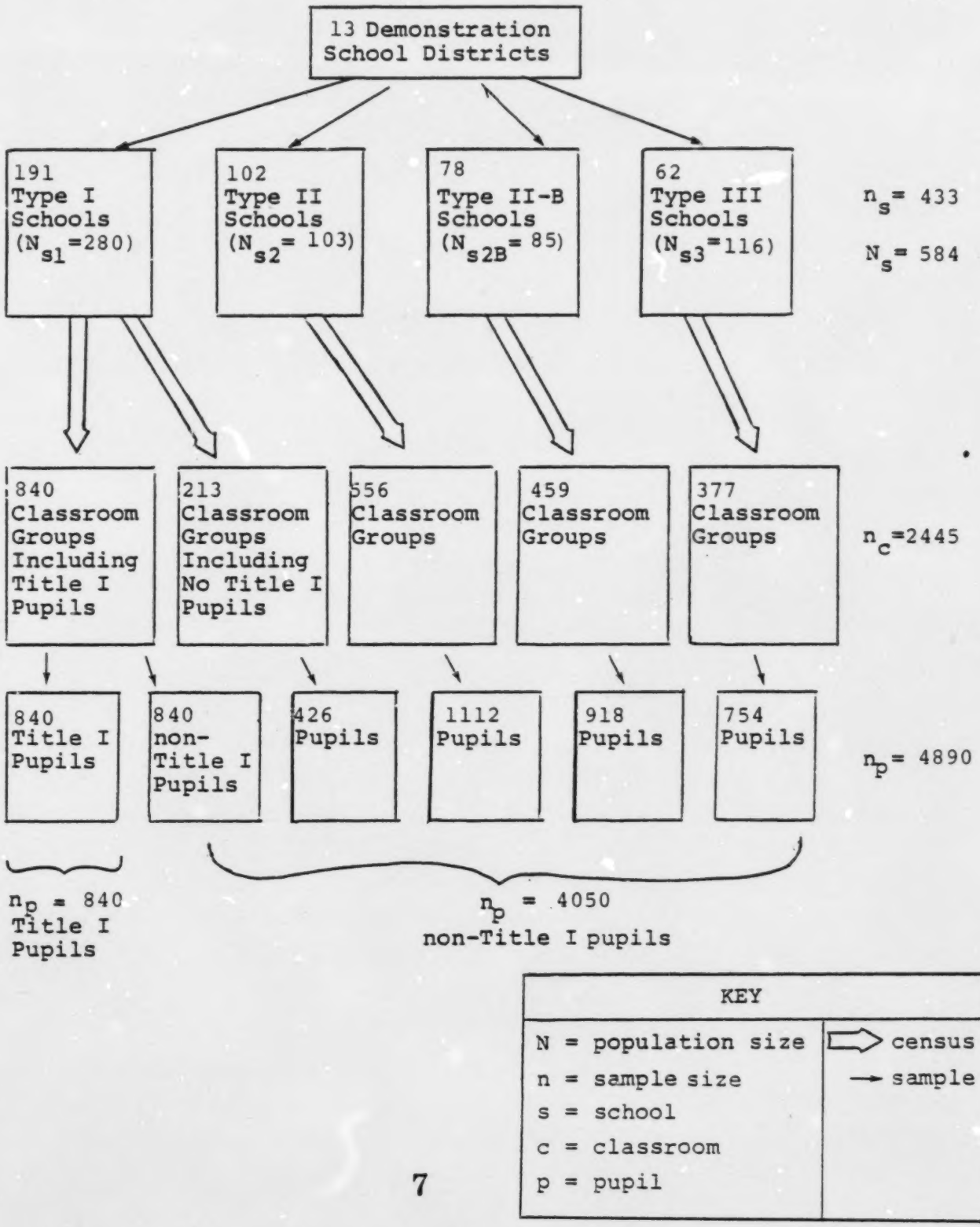
- Type I: Schools that would receive Title I services in 1975-76 and would continue to receive them through the Demonstration;
- Type II: Schools that would not receive Title I services in 1975-76 but which would begin to receive them during the Demonstration; and
- Type III: Schools that would not receive Title I services either before or during the Demonstration.

According to the information we had in January 1976, the 13 Demonstration districts included 584 schools in 1975-76, as Figure 1 indicates. Of these schools, we expected 280 to fall into Type I, 103 into Type II, 116 into Type III and 85 into an uncertain category (Type II-B) between Types II and III. These Type II-B schools did not have Title I in 1975-76 but might receive it during the Demonstration period. For sampling purposes, Type II-B was pooled with Type II and over-sampled. Since the direct effects of the Demonstration were to fall on some of these schools, we had to be sure to have adequate information about them.

Study resources did not permit us to gather classroom/student data in all 584 schools, so school sampling was necessary. The basic analysis was intended to compare school types within each district with respect to services and other characteristics of interest. Since no district or school type

FIGURE 1

DESIGN OF THE YEAR I SAMPLE



was a priori more important to the study's purposes than another, we chose to sample schools from types within districts so as to make as uniform as possible the precision of all possible school type comparisons.*

If schools were distributed evenly among districts and among types in each district, then equal-sized samples would yield equal precisions of estimate; the same would be true if the school populations were so large that the sample sizes would be neglibible by comparison. In fact, however, districts and types included varying and usually small numbers of schools. We needed, therefore, to sample heavily from rather small groups of schools, and so we followed a more complex rule for deciding how many of each type to take from each district. We sampled n schools at random from among the N schools of a given type in a given district, so that the mean of any characteristic in the sample would be 95% certain to deviate by no more than ± d units from the population mean that it estimates, where, approximately

$$d = 2\sigma\sqrt{\frac{N-n}{nN}},$$

and σ is the population standard deviation of the characteristic (assumed constant across types and districts, in the absence of evidence to the contrary). For purposes of design, we chose to tolerate sampling error such that the half-width d of the 95% confidence interval was one-fourth of a standard deviation of the characteristic in question.** Substituting $d = \frac{\sigma}{4}$ into

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*The precision of a difference estimate is governed by that of the less precise of the two estimates being compared: to know a difference better, one should generally try to strengthen the sample in the less well-sampled stratum rather than in the better sampled one. Pairwise comparisons of uniform precision result most economically when types are sampled for uniform precision of simple estimate of the characteristics being compared.

** This selection of a tolerable width for the confidence interval is arbitary. We have followed, in this respect, the example of the Follow Through national evaluation, as reported in Education as Experimentation: A Planned Variation Model. Volume III-B, Abt Associates Inc. U.S. Office of Education Contract No. OEC-300-75-0134, July 1976, p. A-74.

the expression above, we obtain the formula for the sample size n as a function of the stratum population size N within a district:

$$n = \frac{64N}{N + 64}$$

School sampling for the first year of the study took place in January, 1976. Table 1 shows the number of schools, total and sampled, in each stratum in each district. In general, we treated the rule derived above as a guide to minimum sample size: wherever there seemed to be strong reasons to strengthen a particular subsample, we did so. Nowhere did we draw smaller samples than the rule required.

In particular, we included in the sample all schools that either were to be or might possibly be Type II (i.e., Types II and II-B). Since Type II schools were generally fewer than those in the other types, since these schools would most likely benefit from the Demonstration and were therefore analytically important, and since their transitional status might make them more vulnerable to various problems that might lead to later non-response, we thought it prudent to miss no opportunity to gather data on these schools. In some districts, moreover, the sampling rule implied that we should sample all schools but one or two. In such instances, it would have cost more to implement the necessary exception procedures than simply to gather data in the additional schools. In the interest of maintaining field relationships with school district and school personnel, we decided in such cases to include all schools in the sample.

Pupil Selection

To find out how Title I services were distributed within and among the sampled schools, we next considered the necessity of sampling grade levels, classroom groups, and children.

TABLE 1

ELEMENTARY SCHOOL TOTALS AND SAMPLE SIZES
BY DISTRICT AND SCHOOL TYPE

DEMONSTRATION DISTRICT	SCHOOL TYPE						TOTAL ACROSS ALL SCHOOL TYPES	
	TYPE I SCHOOLS WITH TITLE I IN 1975-76 AND 1976-77		TYPE II SCHOOLS WITHOUT TITLE I IN 1975-76, BUT WITH TITLE I IN 1976-77		TYPE III SCHOOLS WITHOUT TITLE I IN 1975-76 & 1976-77			
	TOTAL	SAMPLE	TOTAL	SAMPLE	TOTAL	SAMPLE	TOTAL	SAMPLE
Adams County	3	3	13	13	0	0	16	16
Alum Rock	10	10	9	9	0	0	19	19
Berkeley County	10	10	2	1	1	1	13	12
Boston	66	35	20	20	31	22	117	77
Charlotte	49	28	(24)*	(24)*	0	0	73	52
Harrison County	25	18	5	5	0	0	30	23
Houston	54	30	34	34	81	36	169	100
Mesa	13	13	9	9	3	3	25	25
Newport	4	4	6	6	0	0	10	10
Racine	9	9	(19)	(17)	0	0	28	26
Santa Fe	11	11	5	5	0	0	16	16
Winston-Salem	17	11	(20)	(15)	0	0	37	26
Yonkers	9	9	(22)	(22)	0	0	31	31
TOTALS	280	191	188	180	116	62	584	433

*Numbers contained in parentheses are "pools" of Type II and Type II B from which some subset would become Demonstration Schools. See Text for full explanation.

Assuming an average of something over two classrooms per grade level per school, each including between 20 and 25 children, we estimated that the 433 sampled schools would include a minimum of 5196 classroom groups in grades one through six, comprising between 103,920 and 129,900 children. Given that project resources would permit gathering the necessary data about services on perhaps 4000 or 5000 children, we followed a strategy which combined sampling with further focusing of the target population.

First, we decided to obtain information on every classroom group in grades three and four in the sampled schools, rather than to sample classrooms in a larger number of grades. This approach guaranteed that we would know about any important variations from classroom to classroom resulting from homogeneous classroom grouping, especially as it might cause Title I children to cluster in some classrooms and not in others. We chose grades three and four for several reasons: We reasoned that contiguous grades could share common instrumentation, whereas non-contiguous grades, such as two and five, might require separate questionnaires. In case of important non-response, moreover, analysis might benefit from a pooling of the two grades, which would make more sense in the case of contiguous grades. Grade three is often thought of as the last of the "lower elementary" years, and grade four as the first of the "upper elementary"; comparisons between the two grades would thus have some conceptual basis. Finally, we thought it important to avoid the transitional years of first and sixth grade, when the variables of interest might be particularly subject to fluctuations extraneous to the purposes of the study.

Since we estimated more than 2000 clasroom groups in the third and fourth grades of selected schools, we could afford to gather data on only two pupils* in the average classroom. In addition, since teachers were to be the sources of information on services pupils received, this seemed to be the maximum burden for a given teacher to bear along with his/her regular teaching responsibilities.

In order to permit the desired analytic comparisons, we selected at random one Title I child and one non-Title I child from each classroom group that included both types of children. From classes with all or no Title I children, we selected two children at random.

Response Rates for the Year I Classroom/Student Sample

The sample was designed to be highly insensitive to non-response at various levels. Any failure of districts, schools, or individual respondents to provide the necessary information on time and in a usable form must nevertheless have an effect on the shape and usefulness of the actual set of data on which we shall carry out our analyses. People and organizations being what they are, the actual Year 1 sample differs in several respects from its design.

When the time came to establish the samples of pupils, it appeared that the 433 sampled schools included approximately 2591 third-grade and fourth-grade classroom groups, and so we sent each school the necessary Classroom Roster forms.* For a classroom/student to be included in the Year 1 sample, the roster had to be in our hands by March 31, 1976. By that date, as Table 2 shows, 1941 rosters, or 75% of the total, had been returned. The response rates from the districts were mostly 80% or better, ranging from 100% in Berkeley County down to 56% in Boston.

Two students were selected from each of the 1941 classrooms for which we had roster data. These 3882 pupils constituted the final target sample for Year 1 and were therefore the students for whom we collected information about the types

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* As noted in later discussions about instruments, Classroom Roster data were gathered for all students in selected classrooms. All other data were collected for two sampled students per classroom.

TABLE 2

OVERALL YEAR I RESPONSE RATES
FOR THE CLASSROOM/STUDENT SAMPLE

District	Roster (Classroom Groups Data)			CAL (Pupil data)		
	Targeted	Rostered	Participation Rate (%)	Targeted*	Returned	Response Rate (%)
Adams County	94	64	68	256	244	95
Alum Rock	136	88	65	352	338	96
Berkeley County	62	62	100	248	239	96
Boston	348	194	56	776	684	88
Charlotte	360	283	79	1132	1014	90
Harrison County	81	75	93	300	297	99
Houston	729	520	71	2080	1718	83
Mesa	142	101	71	404	380	94
Newport	29	24	83	96	95	99
Racine	153	122	80	488	479	98
Santa Fe	86	82	95	328	308	94
Winston-Salem	235	199	85	796	744	93
Yonkers	136	127	93	508	330	65
TOTAL	2591	1941	75%	7764	6870	88%

*Since CAL data were obtained for each of two students or each of two observation days, the number of targeted CALs is four times the number of rosters returned.

of services delivered and received in each of the districts. With regard to services received, two Classroom Activities Logs (CAL)* observations were planned for each targeted student. Since there were 3882 targeted students, 7764 CAL observations were planned. Table 2 shows that 6870 of these were actually completed, for a response rate of 88%. Ten of the districts returned more than 90% of their CALs, and only Yonkers (at 65%) had a response rate below 80%.

With regard to services delivered, Student School Record Information Forms (SSRIF), Teacher Background Forms, and Regular and Compensatory Language Arts and Mathematics Modules, all of which were linked to the sampled students, were completed by teachers providing various types of instruction. As expected, response rates for these instruments varied by site and by instrument. However, the overall rates (79.6% for the SSRIF, 76.7% for the Teacher Background Form, and approximately 72% for all Modules) were in line with those for the other classroom/student instruments.

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* The Classroom Activities Log is completed by regular classroom teachers and provides an account of the instruction received by the sampled students on randomly selected observation days.

The Final Year I Classroom/Student Samples

As noted in the introduction to this paper, the final implementation proposals submitted by the 13 districts have increased the number of school types from the original three to a rather complex set of ten. Much of this proliferation of school types is due to school closings and openings; some, however, is due to changes in implementation decisions. Charlotte and Winston-Salem, for example, eliminated Title I services for some schools. This practice had not been planned originally. In addition, Boston, Yonkers, Houston, and Alum Rock altered their plans in terms of the numbers of schools affected.

Table 3 displays the new school type definitions and shows how they vary from district to district. A saturated school (see Alum Rock Types 1 and 2) is one in which all students receive Title I services; a concentrated school (see Alum Rock Types 9 and 0) is one in which only students having specific deficiencies in basic skill areas receive Title I. A "held harmless" school (see Houston Type 0) is one which qualified for Title I under poverty in 1975-76 but did not qualify under achievement in 1976-77. Services were delivered to the school in 1976-77, however, so that students previously served would not be deprived of Title I because of the Demonstration. A "Demonstration School" (see Yonkers Types 9 and 0) is one in which whole or almost whole classrooms are served by Title I rather than the smaller number of students normally receiving Title I attention in the district using a pull-out model). Finally, a "Demonstration School" in Boston means a school which did not qualify under poverty but which did qualify under achievement.

Table 4 displays the distribution of schools in each district by school type resulting from the updated school type definitions. It is apparent from these distributions and from the proceding definitions that we are in a position to address

TABLE 3

DEFINITIONS OF THE TEN SCHOOL TYPES
RESULTING FROM THE DISTRICTS'
FINAL IMPLEMENTATION PROPOSALS

ALL DISTRICTS EXCEPT ALUM ROCK:

Type	75-76	76-77
1	TI*	TI
2	NTI	TI
3	TI	NTI
4	NTI	NTI
5	new school	TI
6	new school	TI
7	TI	closed
8	NTI	closed

ONLY ALUM ROCK:

1	TI	TI (saturated)
2	NTI	TI (saturated)
3	TI	NTI
4	NTI	NTI
5	new school	TI
6	new school	NTI
7	TI	closed
8	NTI	closed

DISTRICT	TYPE 9	TYPE 0
Houston	NTI, NTI (eligible under achievement but skipped)	TI, TI (held harmless)
Alum Rock	TI, TI (concentrated)	NTI, TI (concentrated)
Yonkers	TI, TI (Demonstration school)	NIT, TI (Demonstration school)
Boston	NTI, TI (Demonstration school)	

*Entries indicate the Title I status of schools. A Title I school (TI) is one in which selected students receive Title I services. A non-Title I school (NTI) is one in which no students receive Title I services.

TABLE 4

NUMBER OF SCHOOLS IN
EACH DISTRICT BY SCHOOL TYPE
USING UPDATED DEFINITIONS OF SCHOOL TYPE

SCHOOL DISTRICT	SCHOOL TYPE										TOTAL NUMBER OF SCHOOLS IN DISTRICT
	0	1	2	3	4	5	6	7	8	9	
Adams County, Colorado		3	13								16
Alum Rock, California	4	5	7						1	8	25
Berkeley County, West Virginia		10			3	1					14
Boston, Massachusetts		61	6		35			5	3	7	117
Charlotte, North Carolina		40	17	9	7		2				75
Harrison County, West Virginia		25	5								30
Houston, Texas	10	44	9		95					11	169
Mesa, Arizona		13	12								25
Newport, Rhode Island		4	6								10
Racine, Wisconsin		9	19								28
Santa Fe, New Mexico		11	5								16
Winston-Salem, North Carolina		10	14	3	10		1				38
Yonkers, New York	2	4	1		16			3	3	2	31

different kinds of questions than we had anticipated. This expansion of questions will most certainly result in a more interesting set of research results. The expansion of school types, however, has also resulted in a reduction in sample sizes by school type and grade level for several of the sites. The major implication of this is that grade level analyses cannot be supported in the large majority of districts. Thus, in retrospect, the decision to sample from contiguous grades proved to be a wise one.

SELECTION PROCEDURES AND RESPONSE RATES FOR THE PRINCIPAL, SPECIALIST, AND PARENT SAMPLE

All elementary school principals in the sixteen districts were included in the principal sample. Each of them received a school and principal background form. Principals of schools receiving Title I services also received a Title I supplement; those with other compensatory programs also received an additional supplement.* Response rates for the principal sample are displayed in Table 5. As noted in the table, the overall response rate was found to be 77%. Response rates by site range from a low of 63% in Alum Rock to a high of 100% in Winston-Salem. Only three of the 13 sites had response rates below 74%.

All elementary compensatory language arts and mathematics specialists in each of the Demonstration districts were included in the specialist sample. Each of them received an Instructional Schedule, the primary objective of which is to estimate the amount of time per week specialists spend instructing children. Response rates for this instruments are presented in Table 6. As noted in the table, the overall response rate was found to be 72%.

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* See p. 19 below for a fuller discussion of these instruments.

TABLE 5

1975-76 RESPONSE RATES FOR
PRINCIPAL QUESTIONNAIRES

SITE	PRINCIPAL FORMS MAILED	PRINCIPAL FORM RECEIVED	PERCENT RESPONSE
Adams County, Colorado	16	12	75
Alum Rock, California	19	12	63
Berkeley County, West Virginia	13	11	85
Boston, Massachusetts	117	75	64
Charlotte, North Carolina	73	67	92
Harrison County, West Virginia	30	29	97
Houston, Texas	169	117	69
Mesa, Arizona	25	19	76
Newport, Rhode Island	10	10	100
Racine, Wisconsin	28	22	79
Santa Fe, New Mexico	16	16	100
Winston-Salem, North Carolina	37	37	100
Yonkers, New York	31	23	74
TOTALS	584	450	77

TABLE 6

1975-76 RESPONSE RATES FOR
INSTRUCTIONAL SCHEDULES

SITE	INSTRUCTIONAL SCHEDULE SAMPLE	INSTRUCTIONAL SCHEDULE RETURNED	PERCENT RESPONSE
Adams County, Colorado	9	8	89
Alum Rock, California	16	14	87
Berkeley County, West Virginia	9	7	78
Boston, Massachusetts	265	175	66
Charlotte, North Carolina	153	136	89
Harrison County, West Virginia	18	18	100
Houston, Texas	379	260	69
Mesa, Arizona	13	6	46
Newport, Rhode Island	10	10	100
Racine, Wisconsin	21	16	76
Santa Fe, New Mexico	5	5	100
Winston-Salem, North Carolina	36	28	78
Yonkers, New York	52	27	52
TOTALS	986	710	72

The Parent Sample included (a) parents of all third- and fourth-grade Title I students in Title I schools and (b) parents of all third-grade students in non-Title I schools for whom teachers had completed CALs. Response rates for the sample are presented in Table 7. The response rates for individual sites were high, with the exception of Berkeley County (49%) (where regional factors such as geographical and cultural distance limited the ability to conduct face-to-face interviews in the home), Yonkers (64%), and Adams County (68%).

INSTRUMENTATION

Table 8 summarizes the formal instrumentation employed in the Demonstration Study.* Column 2 of this table describes the format of each of the formal instruments. Column 3 describes the sample for each instrument. Columns 4 and 5 describe the primary and secondary objectives for each instrument.

As can be seen in Table 8 three different self-administered questionnaires were designed for principals. Form I, which was mailed to all principals, included questions about the compensatory activities provided in each school, the school plant and facilities, and the professional background and attitudes of principals towards compensatory education. The Title I and State Compensatory Education supplements gathered additional information on the eligibility procedures and programmatic aspects of each of these programs, respectively.

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* In addition to the formal instrumentation described here, other data sources included various program documents and interview data obtained in visits to the districts. These data sources are not discussed in this paper.

TABLE 7

1975-76 RESPONSE RATES FOR
PARENT INTERVIEWS

SITE	PARENT INTERVIEW SAMPLE	INTERVIEWS CONDUCTED	RESPONSE RATE
Adams County, Colorado	63	43	68
Alum Rock, California	129	115	89
Berkeley County, West Virginia	75	37	49
Boston, Massachusetts	224	206	92
Charlotte, North Carolina	348	318	91
Harrison County, West Virginia	103	82	80
Houston, Texas	552	472	86
Mesa, Arizona	136	124	91
Newport, Rhode Island	27	25	93
Racine, Wisconsin	142	132	93
Santa Fe, New Mexico	100	96	96
Winston-Salem, North Carolina	232	195	84
Yonkers, New York	127	81	64
TOTALS	2131	1723	81

TABLE 8

RESPONDENTS, OBJECTIVES, AND FORMAT FOR
FORMAL INSTRUMENTATION USED IN THE TITLE I DEMONSTRATION STUDY

DATA SOURCE	FORMAT	SAMPLE	PRIMARY OBJECTIVE	SECONDARY OBJECTIVE
Principal Questionnaire: Form I	Self-Administered Questionnaire	All Elementary School Principals in Demonstration Districts	To obtain a thorough description of the compensatory program(s) operating in each school.	To obtain a description of school and facilities, professional staff, and other contextual characteristics, as well as professional response to the Demonstration.
Principal Questionnaire: Title I Supplement	Self-Administered Questionnaire	Principals of all elementary schools currently served by Title I	To obtain a thorough description of the Title I services provided in each school.	To obtain information regarding criteria and procedures used in determining Title I eligibility as well as information about planning.
Principal Questionnaire: State Compensatory	Self-Administered Questionnaire	Principals of all elementary schools served by State Compensatory Education Programs	To obtain a thorough description of the state-funded compensatory services provided in each school.	To obtain information regarding criteria and procedures used in selecting students for state-funded compensatory programs, as well as information about planning
Teacher/Reading and Math Specialist Questionnaire Form I (Background)	Self-Administered Questionnaire	All sample teachers and specialists	To obtain information on staff opinions regarding compensatory education.	To obtain information on staff background characteristics and opinions regarding compensatory education.
Regular Program Description Modules	Self-Administered Questionnaire	Regular language arts and mathematics teachers of sample students	To obtain a description of the regular reading and mathematics instruction provided to sample students.	
Compensatory Program Description Modules	Self-Administered Questionnaire	All compensatory language arts and mathematics specialists, providers of compensatory language arts and mathematics to sample students	To obtain a thorough description of the compensatory reading and mathematics instruction provided to sample students.	To obtain information on the services delivered by compensatory language arts and mathematics specialists.
Classroom Activities Log (CAL)	Self-Administered Record Form	All sample students (completed by homeroom/ primary teacher)	To obtain an estimate of the actual amount of instruction received by each student group.	To obtain an estimate of the actual instructional setting in which students receive instruction.
Classroom Roster	Self-Administered Record Form	All homeroom (primary) teachers in third and fourth grade classrooms in sample schools.	To obtain an unduplicated estimate of the characteristics of students participating in Title I and other compensatory programs.	To facilitate student sampling procedures.
Instructional Schedule	Self-Administered Record Form	All compensatory language arts and mathematics specialists	To estimate the amount of time specialists spend in direct instruction in various programs.	To facilitate specialist sampling procedures and form distribution.
Student School Record Information Form (SSRIF)	Self-Administered Record Form	All sample students (completed by teacher)	To obtain standardized achievement scores on sampled students as well as an unduplicated count of services received from Title I and other compensatory programs.	To obtain information on other student characteristics and amount of support services.
Parent Interview	Face-to-Face Interview	All parents of sampled Title I students	To estimate the socio-economic characteristics of Title I students.	To obtain information on the involvement, knowledge, and preferences of Title I parents.
Parent Advisory Council Interview (PAC)	Face-to-Face Interview	Members of Parent Advisory Council	To obtain information on involvement, knowledge, and preferences of PAC members.	To obtain information on structure and organization of PACs.

Seven different types of instruments were developed for teachers and/or specialists. Both groups were asked to complete Form I, which addressed the professional background and attitudes of these instructional personnel. Homeroom teachers were asked to fill out three additional instruments: the Classroom Roster, Student School Record Information Form (SSRIF), and Classroom Activities Log (CAL). The Classroom Roster was designed to provide an unduplicated count of the number of third and fourth grade students in sample schools receiving compensatory services from any funding source. This instrument, which was completed for each student in each sample classroom, also included questions about such student characteristics as sex, ethnicity, poverty status (as measured by participation in the free lunch program), and reading achievement level.

The SSRIF was designed to supplement the Roster data for a subsample of students. It provided additional information on socioeconomic status and student language factors, as well as more precise data on student achievement. Information on student receipt of support services was also gathered via this form.

The CAL was designed to measure the actual instruction and services received by sample students on each of two randomly selected days. For each ten-minute interval during these sample days, teachers were asked to record the content of the instruction being provided to the sample students, as well as the size of the group and the person providing the instruction. Whether or not the instruction was compensatory and/or bilingual in nature was also recorded.

Compensatory education specialists were asked to complete two types of forms in addition to the background questionnaire: 1) the Instructional Schedule and 2) one or more Compensatory Program Description Modules. The former, which

asked specialists to describe a typical weekly schedule of activities, was intended to gather information on specialists' use of time. The modules were developed to obtain information on the quantitative and qualitative aspects of the compensatory language arts and mathematics instruction delivered to students. Specialists (and others) who taught one (or more) sample student(s) were asked to describe the compensatory instruction received by the group of which the student was a member. Specialists who did not teach sample students were asked to describe the compensatory instruction provided during the first instructional period of the week.

In addition to the above instruments, Regular Program Description Modules were completed by those who taught sample students regular language arts and/or mathematics. Similar in content to the Compensatory Program Description Modules, these addressed the quantitative and qualitative aspects of the regular instruction delivered to the group of which the sample student was a member. In many cases, teachers completed more than one module, i.e., one for each sample student and/or subject taught.

Finally, the parents of selected Title I and non-Title I children were administered face-to-face interviews. Topics covered in these interviews included parental knowledge of, participation in, and satisfaction with compensatory education programs, as well as socioeconomic status. In addition, face-to-face interviews were conducted with PAC members.

SUMMARY

This paper has provided a brief discussion of the sampling procedures and instrumentation used in the Title I Demonstration Study. Because this presentation is brief, certain aspects of the sampling approach and the instrumentation have not been discussed. Those interested in a fuller discussion of these issues, as well as a fuller discussion of the Demonstration research in general, are referred to the Analysis Plan for the Demonstration Title I Research.*

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* Vanecko, J. and Ames, N. Research on Demonstration Compensatory Education Projects: Analysis Plan. Cambridge, Abt Associates Inc., 1976.